

1. A data transfer system used in a system for transferring a plurality of packets in a serial manner, comprising:

a cell sending section for converting said transfer packets created by said packet creating section into a cell able to be sent onto a predetermined communication network and then sending said cell onto said predetermined communication network;

a packet dividing/transferring section for dividing said transfer packet reconfigured by said packet reconfiguring section and then transferring in the serial manner.

2. The data transfer system according to claim 1, wherein said packet creating section collects said plurality of packets transferred in the serial manner every first time lapse.

3. The data transfer system according to claim 1, wherein said packet creating section includes, in said packet, information of time when said plurality of packets are sent.

1 9. The data transfer system according to claim 1,
2 wherein each of a transmission source and a transmission
3 destination which are connected to said predetermined
4 communication network is a terminal connected to one serial bus.

1 14. A data transfer system used in a system for
2 transferring a plurality of packets in a serial manner,
3 comprising:

1 17. The data transfer system according to claim 14,
2 wherein said packet dividing/transferring program transfers
3 said divided packet in said serial manner based on said time
4 information.

1 18. The data transfer system according to claim 17,
2 wherein said packet dividing/transferring program decides a
3 cycle during which said divided packet is to be transmitted,
4 based on said time information.

1 19. The data transfer system according to claim 14,
2 wherein a packet, of said plurality of packets, transferred to
3 said packet creating program is an isochronous packet in
4 accordance with IEEE1394 Standards.

1 20. The data transfer system according to claim 14,
2 wherein a packet, of said plurality of packets, transferred to
3 said packet dividing/transferring program is an isochronous
4 packet in accordance with IEEE1394 Standards.

1 21. The data transfer system according to claim 14,
2 wherein said predetermined communication network is configured
3 from one virtual channel.

1 22. The data transfer system according to claim 14,
2 wherein each of a transmission source and a transmission
3 destination which are connected to said predetermined
4 communication network is a terminal connected to one serial bus.

1 23. The data transfer system according to claim 14,
2 wherein said predetermined communication network is configured
3 from a plurality of virtual channels and wherein a predetermined
4 channel of said plurality of virtual channels is specified to
5 each packet transferred to said packet creating program.

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1 24. The data transfer system according to claim 23,
2 wherein information of said predetermined channel of a virtual
3 channel, of said plurality of virtual channels, is sent to both
4 said packet reconfiguring program and said packet
5 dividing/transferring program.

1 25. The data transfer system according to claim 24,
2 wherein said packet dividing/transferring program transfers
3 said divided packet based on said predetermined channel
4 information.

1 26. The data transfer system according to claim 23,
2 wherein a transmission source connected to said predetermined
3 communication network is a terminal connected to one serial bus,
4 while communication destination terminals connected to said
5 predetermined communication network are terminals connected to
6 mutually different serial buses.

1 27. A data transfer method employed in a system for
2 transferring a plurality of packets in a serial manner,
3 comprising the steps of:

4 collecting, as a first step, said plurality of packets
5 transferred in the serial manner in an order said plurality of
6 packets are to be transmitted, to create a transfer packet;
7 converting, as a second step, said transfer packet created by
8 said first step into a cell able to be sent to a predetermined
9 communication network and then sending said cell to said
10 predetermined communication network;

32. The data transfer method according to claim 27,
wherein a packet transferred at said first step is an
isochronous packet in accordance with IEEE1394 Standards.

1 38. The data transfer method according to claim 37,
2 wherein said fourth step transfers said divided packet based
3 on said predetermined channel information.

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